PROCEEDINGS OF THE AUSTRALIAN RANGELAND SOCIETY BIENNIAL CONFERENCE

Official publication of The Australian Rangeland Society

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Form of Reference

The reference for this article should be in this general form; Author family name, initials (year). Title. *In*: Proceedings of the nth Australian Rangeland Society Biennial Conference. Pages. (Australian Rangeland Society: Australia).

For example:

Anderson, L., van Klinken, R. D., and Shepherd, D. (2008). Aerially surveying Mesquite (*Prosopis* spp.) in the Pilbara. *In*: 'A Climate of Change in the Rangelands. Proceedings of the 15th Australian Rangeland Society Biennial Conference'. (Ed. D. Orr) 4 pages. (Australian Rangeland Society: Australia).

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The Australian Rangeland Society

SUSTAINABLE MANAGEMENT OF THE GREAT ARTESIAN BASIN THROUGH PARTNERSHIPS AND SHARED INVESTMENT

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Although large volumes of water are stored in the Great Artesian Basin only a relatively small amount can be used on a sustainable basis. The availability of Basin water, originally from natural springs and later from bores, has had a major influence on the natural and cultural history of the Basin. Basin water has been essential for the development and maintenance of pastoral enterprises since the turn of the century and recently for mining and the growing outback tourist industry. Access to reliable Basin water supplies is also essential to the maintenance of lifestyles and the social infrastructure that exists in the sparsely populated Basin.

Uncontrolled and poorly managed use of GAB water has caused localised reduction in artesian pressure and allowed the extraction to exceed the recharge rate. Such use is unsustainable and is having adverse effects on current users as well as undesirable impacts on the natural values of the region.

THE GAB MANAGEMENT PLAN

For more than a century the pastoral industry in the Basin has relied on access to artesian water from the GAB and developed management practices that rely on delivering water to stock through open drains. However, the volume of water which flows from the hundreds of uncontrolled GAB bores into bore drains far exceeds that required by stock and causes other land-use problems. This problem was recognised more than seventy years ago and since that time attempts have continuously been made to reduce the waste and manage water from the bores better.

In the past a poor understanding of the GAB and the inadequacies of the technology of the times often limited the effectiveness of management decisions. The remoteness of the Basin and the wide distribution of the bores has meant that the economic and cultural significance of the wasted water and the impacts of poor management have not been acknowledged by decision makers or opinion leaders. This has not engendered the will or urgency among politicians or water managers to address the problem and has led to the unsustainable situation that the GAB is now in.

We now have a much better understanding of the capacity of the GAB, the technology to control bores and the opportunity to manage the water supply judiciously. A well managed GAB has the capacity to supply current users and support additional development or shifts to higher value industries without causing unacceptable impacts on cultural or environmental values. Because this valuable resource is finite and distributed over a vast area sensible Basin-wide planning, continued government support and coordinated management is required to ensure to ensure a sustainable water supply.

The Great Artesian Basin Consultative Council formed in 1997 produced a Strategic Management Plan (SMP) that suggests a comprehensive framework to achieve sustainable management of the Basin over a fifteen-year period. Committees within each of the State Jurisdictions will work with Government agencies and water users to produce plans to implement the strategies suggested in the Basin-wide Management plan.

The SMP is based on the premise that water users, Governments and other stakeholders have important roles to play in infrastructure renewal and the management of the Basin. The SMP says that most of the responsibility for sustainable Basin management rests with water users. However, State and Commonwealth Governments and other stakeholders have key roles in reforming current management practices. State governments have a constitutional responsibility to protect natural and cultural heritage values and to ensure water is used judiciously to support community values and benefits. Governments may also share in investments when market or regulatory frameworks fail and where current investment is insufficient to achieve best outcomes. Governments also need to participate where a public good or benefit can be shown

IMPLEMENTATION OF THE SMP

One of the major issues suggested by interest groups that needs to be addressed by the SMP is:

Water users, government and community generally lack a full appreciation of the economic, social, cultural and environmental values of the Basin and its current condition.

Past attempts to improve resource management and use, have been compromised, because of a lack of appreciation of the value of the Basin, and its limitations. A lack of understanding about the rights, responsibilities and limitations of governments, water users and other interest groups and misunderstandings about the impacts of changed water management practices on various groups also imposes severe limitations on the capacity to address Basin-wide issues.

The SMP suggests that the implementation of the plan across the Basin must be based on shared values, investments and partnerships between governments, water users and other interest groups. The challenge is to reconcile the issues, understanding and expectations that drive current management practices in the pastoral industry with the bureaucratic issues, understanding and expectations that drive various State and Commonwealth Departments.

This reconciliation must be based on shared understanding that allows bureaucrats and pastoralists to work as cooperative partners to make decisions about shared investment and improved management practice. Unless this reconciliation is made in a way that meets the requirements of both groups cooperative partnerships will never operate and the time and resources needed to negotiate processes will severely limit outcomes achieved.